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NOTES ON MUSCOID SYNONYMY WITH DESCRIPTIONS OF THREE NEW SPECIES

(DIPTERA)[1]

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The following notes have accumulated during the past several years and it seems desirable to place them on record since the revised nomenclature in some cases has been used in identification for other workers. I am indebted to Curtis W. Sabrosky for notes on certain types in the U. S. National Museum and also for making direct comparisons of type material in a number of cases. Types of the new species described below are in my collection.

Sarcophaga californica Parker

Sarcophaga californica Parker, 1918, Jr. Ent. Zool., Pomona College, 10: 32.

Sarcophaga postilla Reinhard, 1947, Jr. Kans. Ent. Soc. 20: 111.

I have recently seen a male specimen of *californica;* the genitalia clearly show that *postilla* is identical. Both type series are from California.

Sarcophaga pleomenda, new name

Sarcophaga mendax Reinhard, 1947, Jr. Kans. Ent. Soc. 20: 107 (*nec* Walker, 1859, Proc. Linn. Soc. London, Zool. 4: 132).

The overlooked preoccupation of *mendax* by Walker necessitates a new name for my species.

Frontiniella parancilla Townsend

Frontiniella parancilla Townsend, 1918, Proc. Ent. Soc. Wash. 20: 21.
Achaetoneura stilla Reinhard, 1943, Jr. Kans. Ent. Soc. 16: 17.

Through some recent exchanges I acquired a pair of paratypes of *F. parancilla; A. stilla* is the same species. Use of the emended spelling has become customary as the original citation seems an obvious misprint.

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Cistogaster atrota Reinhard

Cistogaster atrota Reinhard, 1935. Ann. Ent. Soc. Amer. 28: 173.

Hitherto the only known specimen of this species was the type female from Amherst, Ohio. Brooks, without seeing the latter, cited it in synonymy with *Gymnosoma dubia* West, which was designated as the type of *Siphopallasia* (Can. Ent. 77:226, 1945). I have seen the type series of *dubia* West in the Cornell University Collection. *Atrota* is readily distinguished from *dubia* in having a distinctly wider and less divergent front; third antennal segment nearly as wide as long and a trifle shorter than second; arista strongly swollen and rather sharply tapered on basal third, etc. Both species have longer antennae than any of the allied forms of *Cistogaster* and this seems to be the principal item cited in favor of a supposed need for more restricted generic limits here.

Euhallidaya genalis (Coquillett)

Biomyia genalis Coquillett, 1897, Rev. Tachin., p. 83.
Euhallidaya severinii Walton, 1914, Proc. Ent. Soc. Wash. 16: 130.
Orphanotrophus orbitalis Reinhard, 1943, Bul. Brk. Ent. Soc. 38: 83.

The synonymy of *severinii* is by Townsend (Manual of Myiology, pt. 9, p. 259, 1939). *O. orbitalis* is based upon the same type species and equals *E. genalis*.

Phytopsis californica (Coquillett)

Amobia californica Coquillett, 1895, Jr. N. Y. Ent. Soc. 3: 100.
Phytopsis californica (Coquillett) Townsend, 1915, Proc. Biol. Soc. Wash. 28: 20.
Athanatus knowltoni Reinhard, 1947, Jr. Kans. Ent. Soc. 20: 15.

The differences between the genotype specimens are primarily sexual, hence *A. knowltoni* falls as a complete synonym of *P. californica*.

Eupelecotheca celer Townsend

Eupelecotheca celer Townsend, 1918, Ins. Inse. Mens. 6: 169; Townsend, 1940, Manual of Myiology, pt. 10, p. 103 (recharacterization).
Pantagathus alogus Reinhard, 1935, Ann. Ent. Soc. Amer. 28: 168.

This synonymy has been verified by a comparison of the type specimens.

Neothelaira aurifrons (Coquillett)

Masicera aurifrons Coquillett, 1897, Rev. Tachin., p. 115.
Neothelaira dexina Townsend, 1912, Jr. N. Y. Ent. Soc. 20: 109.
Aulicomyia invulnerata Reinhard, 1943, Bul. Brk. Ent. Soc. 28: 80.

In redescribing the genotype, Townsend has stated that *dexina* equals *aurifrons* (Manual of Myiology, pt. 8, p. 346, 1936). Apparently *A. invulnerata* is likewise based upon the same type species and equals *N. aurifrons*.

Neothelaira pusilla, new species

Female.—Head pollen golden, occiput cinereous; frontal stripe brown, distinctly narrower than parafrontal width; outer verticals scarcely differentiated; frontal bristles in a single row, three beneath antennal base; parafacial fully one-half clypeal width; cheek about one-third the eye length; front at vertex 0.35 of head width (one specimen); first

and second antennal segments rather elongate, reddish yellow, base of third segment also reddish but infuscated below arista; latter nearly two and one-half times length of second segment; arista shorter than antenna, thickened and tapering to about middle, thence very slender to tip; palpus pale reddish yellow, longer than haustellum; eye bare, not reaching to vibrissal level.

Thorax and scutellum black, moderately gray pollinose, showing four narrow dorsal stripes before suture and five behind. Chaetotaxy: acrostichal 2,3 (none immediately before suture); dorsocentral 3,3; presutural 1 (outer); sternopleural 3; pteropleural 1 (smaller than sternopleural); intrapostalar differentiated; scutellum with 1 approximated discal, 3 strong lateral and 1 small decussate apical pair; prosternum, propleuron and postnotal slope bare.

Wing subhyaline; costal spine distinct but not very strong; third vein setulose three-fourths way to small cross vein; last section of fifth vein two-fifths length of preceding section; first posterior cell narrowly open well before wing tip; calypters rather small, about as wide as long, white with a faint yellowish tinge.

Legs pale reddish yellow, tarsi blackish; claws and pulvilli shorter than last tarsal segment.

Abdomen as wide as thorax, pointed apically; fourth segment and entire venter wholly reddish, remainder of segments except lateral margins of third black, with thin gray pollen above which changes from light to dark on either side of median line when viewed in opposite angles; third segment with a complete marginal row of rather short bristles, one pair of median marginals on each preceding segment; intermediate segments with a smallish but distinct discal pair; anal segment with short bristles and hairs above extending from base to apex; genital orifice elongate and slitlike, caudoventral.

Length, 5.5 mm.

Type.—Holotype ♀, Atherton, Missouri, August 4, 1934, without collector's label.

Panacemyia Townsend

Panacemyia Townsend, 1919, Ins. Insc. Mens. 6: 164; type, *panamensis*, new, from Taboga Island, Panamá.

Nimiocauda Reinhard, 1943, Bul. Brk. Ent. Soc. 38: 78; type, *erilis*, new, from Wading River, L. I., New York, which is congeneric with above genotype.

The above synonymy is based upon a comparison of the genotypes. The principal distinction between the latter is the presence of smallish but distinct ocellars in the type series of *erilis*. Although *panamensis* is described as having no ocellars, there is a pair of minute hairs present in the type female specimen. *Erilis* may be considered provisionally distinct on presence of ocellars (four known females all agree in this respect); however, the undeveloped ocellars in *panamensis* may not prove a constant character.

Panacemyia pallipes, new species

Similar to *crilis* in build and general aspect, but the legs (except for the tarsi) are pale reddish-yellow.

Female.—Head black in ground color with heavy gray pollen on parafrontal, parafacial, cheek and occiput; frontal stripe deep brown to black, slightly narrower than parafrontal width; eye practically bare, strongly oblique and reaching nearly to vibrissal level; front at vertex 0.24 and 0.22 of head width (two specimens); frontals in a single row, extending one or two bristles below antennal base; proclinate orbitals two, ocellars small but distinct; inner verticals decussate (straight in one specimen) and rather short; parafacial strongly narrowed below; facial ridge bare except one or two hairs above vibrissa; latter near oral margin; cheek one-seventh eye length; antenna reddish black, third segment nearly two and one-half times length of second; arista micro pubescent, slender beyond moderately thickened base; palpus pale reddish yellow; proboscis short.

Thorax black, wholly gray pollinose except four well defined velvety black stripes above, all narrowly interrupted at suture; scutellum concolorous with thorax. Chaetotaxy: acrostichal 3,3; dorsocentral 3,3; presutural 2; humeral 3; posthumeral 1; sternopleural 3 (lowermost small or sometimes hairlike); pteropleural 1 (small); intrapostalar differentiated; scutellum without apicals, 1 small discal and 3 lateral pairs; postnotal slope, propleuron and prosternum bare.

Wing extending well beyond tip of abdomen, gray hyaline; veins including costa yellow; third vein with one bristly hair near base; first posterior cell narrowly open slightly before extreme wing tip; cubitulus without stump or fold, near hind margin of wing; costal spine distinct (in one specimen equal to length of small cross vein); epaulet and subepaulet infuscated; calypters pale tawny, longer than wide.

Legs moderately long and slender, rather weakly bristled; mid tibia with one smallish bristle on outer front side below middle; hind tibia with a row of about five widely spaced bristles on outer posterior edge, one near middle considerably stouter than rest; tarsi blackish, claws and pulvilli shorter than apical segment.

Abdomen black, gray pollinose, only the three basal segments visible in dorsal aspect, the fourth compressed and strongly deflexed; first and second segments each with one pair of long erect median marginals and third with a complete marginal row; one pair of good-sized erect discals on segments two and three; anal segment beset with scattered weaker bristles above, one pair near median basal margin somewhat stouter; hairs on upper surface rather sparse and depressed; in most views the abdomen shows a roundish black spot at the base of all macrochaetae and larger hairs; ovipositor elongate, telescopic, directed downward.

Length, 3.5-5.0 mm.

Type.—Holotype ♀, College Station, Texas, May 16, 1946 (H. J. Reinhard); 1 female paratype, same data, except collected May 15, 1943.

Panacemyia verticalis, new species

Male.—Similar to the preceding species except as follows: Front at vertex 0.18 of head width; frontal stripe wider than parafrontal on entire length; ocellar and vertical bristles vestigial; orbitals absent; frontal row irregular anteriorly, three or four bristles beneath base of antenna; latter black with a reddish tinge on apex of second segment and base of third; cheek about one-eighth of eye length; thinly gray pollinose; facial ridge with fine hairs on about lowest fifth; palpus black; occiput cinereous becoming blackish above; legs black, long and slender; claws and pulvilli elongate; abdomen moderately long and arched in profile, fourth segment normal in structure; intermediate segments each with two pairs of discals, hairs on upper surface long and erect; anal segment strongly bristled above; genitalia retracted, caudoventral; inner forceps blackish, short, tapering to a sharp tip, latter slightly divided and bowed forward; accessory process reddish, much wider than forceps and broadly rounded at apex; fifth sternite small, with a median V-shaped incision, lobes reddish black, clothed with pale pubescence on inner margin.

Length, 7.5 mm.

Type.—Holotype ♂, Amherst, Ohio, June 15, 1924 (H. J. Reinhard).

This is the first male specimen of the genus hitherto brought to light. It agrees with *panamensis* in having the ocellars reduced to small hairs and in some additional details, but the black palpi in the present form seem to indicate a specific difference. The marked reduction in size of the inner verticals is unusual, but this and the differences in abdominal chaetotaxy may prove to be secondary sexual items.

THE GENUS CHRYSOZONA MEIGEN IN NORTH AMERICA

(Diptera, Tabanidae)

By Cornelius B. Philip, *National Microbiological Institute, Public Health Service, Rocky Mountain Laboratory, Hamilton, Mont.*

The rarity of flies of the genus *Chrysozona* (syn. *Haematopota* Meig.) along the entire Atlantic Coast from Rhode Island south without a male showing up until within the past 2 or 3 years is most remarkable, considering the greater frequency of *Chrysozona americana* (O.S.) in the Northwest and elaboration of the genus in the Old World. The writer was provided a specimen of supposed *C. "rara"* through the generosity of Dr. A. B. Champlain which proves to differ from either of the eastern described species—*C. rara* (Jhns.) or *C. punctulata* (Macq.) This specimen has the marked dorsal notch subapically on the scape seen in *C. punctulata*, but